

Title (en)
AC-TO-DC CONVERTER SYSTEM

Title (de)
WECHSELSTROM-GLEICHSTROM-WANDLERSYSTEM

Title (fr)
SYSTÈME CONVERTISSEUR ALTERNATIF-CONTINU

Publication
EP 3453106 A1 20190313 (EN)

Application
EP 17721153 A 20170504

Priority

- EP 16168376 A 20160504
- EP 2017060628 W 20170504

Abstract (en)

[origin: EP3242382A1] A converter system (10) for converting a three-phase or a single-phase AC voltage into a DC voltage, wherein the converter system (10) comprises three converter branches (12), each converter branch (12) comprising a first input (16a) and a second input (16b) to be supplied with a single-phase AC voltage and a first output (18a) and a second output (18b) providing a DC voltage; wherein each converter branch (12) comprises an AC-to-DC stage (22) and a DC-to-DC stage (24), which are connected between the first and second input (16a, 16b) and the first and second output (18a, 18b); wherein the converter system (10) is configured for interconnecting the first input (16a) of each converter branch (12) with a phase of a three-phase grid (38a) and for interconnecting the first inputs (16a) of the converter branches (12) with a phase of a single-phase grid (38b); and wherein the converter system (10) is configured for interconnecting the second inputs (18b), which are interconnected with each other, of the converter branches (12) with a neutral point (N) of the three-phase grid (38a) or the single-phase grid (38b).

IPC 8 full level

H02J 7/02 (2016.01); **H02M 1/10** (2006.01); **H02M 1/42** (2007.01); **H02M 7/23** (2006.01)

CPC (source: EP US)

H02J 7/00 (2013.01 - US); **H02J 7/02** (2013.01 - EP US); **H02M 1/10** (2013.01 - EP US); **H02M 1/32** (2013.01 - US);
H02M 1/4216 (2013.01 - EP US); **H02M 1/4225** (2013.01 - EP US); **H02M 3/01** (2021.05 - EP US); **H02M 3/33573** (2021.05 - EP US);
H02M 7/23 (2013.01 - EP US); **H02J 2207/20** (2020.01 - EP US); **H02M 1/007** (2021.05 - EP US); **Y02B 40/00** (2013.01 - EP US);
Y02B 70/10 (2013.01 - US)

Citation (search report)

See references of WO 2017191245A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3242382 A1 20171108; CN 109463029 A 20190312; CN 109463029 B 20220503; EP 3453106 A1 20190313; EP 3453106 B1 20220706;
US 11050352 B2 20210629; US 2019074775 A1 20190307; WO 2017191245 A1 20171109

DOCDB simple family (application)

EP 16168376 A 20160504; CN 201780042096 A 20170504; EP 17721153 A 20170504; EP 2017060628 W 20170504;
US 201816180476 A 20181105